Name:_____

Date:_____Class:____

Solving Logs Assignment

Directions: Solve each equation. Check for extraneous solutions.

1. $\log_3(3x-11)=\log_3(25-x)$

2. $\log_7(4n-7)=\log_7(-3n)$

3. $\log_2 75=\log_2 3+\log_2(2y-1)$

4. $2\cdot\log m=\log 36$

5. $\log_4 108-\log_4 9=\log_4(7a-9)$

6. $\frac{1}{3}\cdot\log_5 64=\log_5 8+\log_5 p$

7. $\log(w^2+21)=\log(10w)$

8. $\log_2(2x)+\log_2(x-7)=\log_2(4x)$

9. $\log_4(2m^3 - 14m^2) - \log_4(2m) = \log_4 8$	**10.** $2 \cdot \log(x - 3) = \log 25$
11. $\log_3(2x - 7) = 4$	**12.** $\log_8(28k - 20) + 15 = 18$
13. $\log_9(15 - 4n) = \frac{1}{2}$	**14.** $\log_2 4 + \log_2(c - 9) = 5$
15. $2 \cdot \log_4 k = 4$	**16.** $\log_8(p^2 + 15) = 2$